

ROUND 11 CAPITAL PROJECT NOMINATION FORM
LAKE TAHOE FEDERAL SHARE EIP CAPITAL PROJECTS
APPENDIX K

Project Name:	FS Public Resorts BMP Retrofits, Phase 2	EIP Number: <i>(Required)</i>	16
Federal Agency Sponsor: <i>(Required)</i>	USFS - LTBMU	Contact:	Daniel Cressy
Threshold:	Water Quality	Phone Number:	(530) 543-2857
Threshold Standard:	WQ-5	Email:	dcressy@fs.fed.us
FUNDING REQUESTED IN THIS ROUND:		\$ 2,000,000	

Federal Share EIP Consideration

Select "yes" or "no" for each question. If you have a "yes" response, briefly describe. **Projects must meet one or more of these 5 items.**

1. Does the project involve federal land? Yes No
If yes, is the federal land involved important to successful implementation of the project? ☒ ☐

Implementation of water quality protection BMPs on federal lands at a portion of Camp Richardson Resort campground areas will lead to improved water clarity in Lake Tahoe.

2. Is this project identified in the EIP? If yes, please ensure the EIP number is identified in the above project information box. If no, provide a description of the projects contribution to the EIP program. Yes No
☒ ☐

EIP # 984, Camp Richardson Resort Masterplan and BMPs.

3. Does the project involve the conservation of a federal or regional threatened, rare, endangered, or special interest species? Yes No
☐ ☒

4. Does the project involve an identified federal interest such as the detection and eradication of non-native invasive species (aquatic or terrestrial)? Yes No
If yes, identify the species? ☒ ☐

Project would treat identified federal interest noxious weed species, Bull Thistle (Cirsium vulgare).

5. Does the project contribute to supporting implementation of capital projects in the EIP? Such projects that fulfill this function would include technical assistance, data management, and/or resource inventories? Yes No
☐ ☒

Check all Capital Focus Area(s) that apply:

- ☒ 1. **Watershed and Habitat Improvement**
- ☒ 2. **Forest Health**
- ☒ 3. **Air Quality and Transportation**
- ☒ 4. **Recreation and Scenic**

Check all that apply (must meet a minimum of one category):

- ☐ 1. **Continued emphasis on forest ecosystem health/fuels reduction projects considering the LTBMU Stewardship Fireshed Assessment and Lake Tahoe Basin Multi-Jurisdictional Fuels Reduction and Wildfire Prevention Strategy.**
- ☒ 2. **Continued implementation of projects approved in Rounds 5 through 10 which implement the EIP. Project proposal should clearly describe the phase/product being produced along with the consequence of not completing the project phase proposed for Round 10.**

List Rounds and funding:

Round 5, F015 - Preparation and completion of the Camp Richardson Resort Vision Plan, pre-NEPA concept design and collaboration for Camp Richardson Resort campground and parking BMP retrofit, and partial funding of NEPA contract. Round 8, F120 - Partial funding of NEPA contract, design and implementation of Camp Richardson Resort parking BMPs in 2010. Round 9, F131 - Post-NEPA engineering design of Camp Richardson Resort campground BMP retrofit and preparation of contract documents for implementation.
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- ☒ 3. **Project is consistent with and contributes toward TMDL pollutant reductions within the four source categories (atmospheric, urban & groundwater, forested uplands, and stream channel). *NOTE: If “yes”, then please respond to questions in the accomplishments section of the nomination proposal.***
- ☐ 4. **Control of aquatic invasive species and prevention and/or detection of new aquatic invasive species.**

Project Nomination Proposal Outline

Project Summary (a brief summary which clearly describes the proposed project –maximum 200 words)

- Summarize ONLY this Round 11 project.

This project would implement water quality protection BMPs at the "Badger's Den" area, and a portion of the "Eagle's Nest" area of the Camp Richardson Resort campground (approximately 40% of the resort campground area). Campsites and coverage would be removed from the Pope Marsh SEZ, and these areas would be restored to reduce soil compaction and erosion. Non-utility hook-up campsites and vehicle circulation would be re-constructed to provide erosion source control, dispersed stormwater infiltration, and portions of a public campground facility that meet health and safety standards including adequate access for emergency service vehicles. Project area campground capacity would be reduced by approximately 20%, and two highway intersections would be reconfigured to reduce vehicle traffic congestion.

This project could be reduced in scale by eliminating the BMP improvements from the designated portion of the "Eagle's Nest" campground area. This reduced scale would reduce the project cost by \$500,000.

Project Description

Introduction

- Provide project background which explains the situation and state the problem and how it will be addressed.

***Note:** Focus needs to be the project in Round 11 not a history of an ongoing project or program.*

The Camp Richardson Resort and campground was purchased by the US Forest Service in the 1960's to provide public recreation access to Lake Tahoe. Prior to purchase by the Forest Service, the resort and campground had provided recreation opportunities since the 1940's. The Resort's recreation amenities were developed and evolved over time – they were never designed to address environmental protection measures – resulting in a densely compacted landscape with unimproved roads and camping spurs that generate sediment that is transported to Lake Tahoe through the air and storm water run-off. The Resort's popularity continues today and currently offers 330 campsites and other amenities which are routinely fully occupied during summer months. Traffic congestion associated with Resort use and vehicle travel on Highway 89 is a chronic problem in the summer months resulting in increased air pollution, increased safety concerns, decreased quality of recreation experience, and decreased visual quality.

Previously funded SNPLMA projects have enabled the Forest Service to complete a Vision Plan for the Resort, develop a pre-NEPA conceptual BMP design for the campground area, and initiate environmental documentation in accordance with NEPA. NEPA is anticipated to be complete in early 2010. Initiation of Round 9-approved final engineering BMP designs and contract documents for campground BMP improvements will occur following completion of NEPA documentation. Engineering plans are anticipated to be ready to implement campground BMP and traffic circulation improvements in early 2011, if funding can be secured. Round 11-funded work would implement BMPs in approximately 40% of the resort campground area, focusing on areas where SEZ restoration can be achieved and impervious coverage can be reduced. Highway 89 traffic congestion and its associated environmental impacts would be incrementally reduced by decreasing the campground capacity approximately 20% in the project area, and by reconfiguring and combining two existing highway intersections into one intersection.

- Describe what Round 11 is specifically funding; list the number of years the requested funding will cover; briefly describe how this project links into previous and future projects, and identify other round funding.

NOTE: Focus should be on finishing current/phased projects. If project is new in Round 11, clearly identify if the project is for planning or implementation and how it will be completed with Round 11 funds. Identify if Round 12 or other funds will be needed to complete the project. Please identify total non-SNPLMA funds that are being contributed/dedicated to the proposed Round 11 project and the source of those funds.

This project would implement a portion of the resort BMP retrofit plans developed under Round 9 funding. This project would result in an implementation contract which is anticipated to be completed within one year. Project management, contract solicitation, administration, and project close-out would result in a two-year overall project duration.

This project would implement water quality protection BMPs at the "Badger's Den" campground area and a portion of the "Eagle's Nest" campground area of the Camp Richardson Resort campground (approximately 40% of the resort campground area). Campsites and coverage would be removed from the Pope Marsh SEZ, resulting in approximately 6,000 square feet of restoration to reduce soil compaction and erosion, and re-establish native vegetation. Non-utility hook-up campsites and vehicle circulation would be re-constructed to provide erosion source control and dispersed stormwater infiltration permanent BMPs. Campground roads would be reconstructed to reduce the production of fine sediment which can be transported to Lake Tahoe, negatively affecting its water clarity. The reconstructed campground road system would allow for emergency vehicle access, which is currently limited, in the event of a medical or wildfire emergency. Overall impervious coverage within the project area is anticipated to be reduced by over 352,000 square feet (60%) from current conditions.

Project area campground capacity would be reduced approximately 20%, and two Highway 89 intersections would be re-configured to reduce vehicle traffic congestion. These improvements would incrementally reduce traffic congestion as well as air pollution and other negative effects in the Resort's highway corridor.

This Round 11 project would implement the first phase (approximately 40%) of campground BMP improvements at the Resort campground. A subsequent Round 12 proposal is anticipated, requesting funding to implement water quality BMP improvements within the remaining 60% of the campground area which would provide utility hook-up services for campground visitors (SNPLMA funding would not be requested to fund utility portions of this future BMP project). The Round 11 project is designed as a stand alone project – this project is not dependent on Round 12 funding to achieve its intended environmental benefits, however the Round 11 project only addresses approximately 40% of the BMP needs within the campground. Non-SNPLMA funds from the Camp Richardson Resort Granger-Thye fee offset program would provide funds to achieve facility improvements that are not appropriately funded through SNPLMA, such as rehabilitation of underground utility services within the campground. In addition, US Forest Service Recreation Site Improvement (RSI) funds have been allocated to replace two of the existing campground restroom/shower buildings.

Round 5 funding (BLM #F015) provided for the development of a pre-NEPA conceptual BMP retrofit plan, completion of the Vision Plan for the resort, development of a BMP retrofit proposed action, and initiation of NEPA analysis and documentation for the

campground and vehicle circulation BMP retrofit. Round 8 funding (BLM #F120) provided for NEPA analysis, and upcoming design and implementation of BMPs at four Forest Service public resorts, including Camp Richardson. Round 9 funding (BLM #F131) provides for engineering design of BMPs and contract preparation for their implementation at the Camp Richardson Resort campground.

Beyond the campground area, other BMP and facility needs at Camp Richardson Resort are identified, including rehabilitation of the resort cabin area. Design, planning, and implementation of facility and BMP improvements at these areas will be pursued in future years through available mechanisms.

- Describe the “readiness” of this project to move forward (urgency, capacity, capability, environmental documentation, interagency agreements, etc)

Implementation of this project to address existing threats to water quality has been recognized as an urgent need for a number of years by a number of organizations, including the Forest Service, TRPA, and the Lahontan Regional Water Quality Control Board. Development of a proposed action to address environmental protection and facility needs has been carefully designed and coordinated with input from regulatory agencies and other stakeholders. NEPA analysis and documentation is currently underway and is anticipated to be complete in early 2010. Round 9-approved funding is ready to be obligated in early 2010 to prepare engineering design and contract documents for implementation of water quality protection BMPs in the project area. Round 11 funds would enable a portion of this project to be implemented in 2011.

- Describe partnerships for this project. (if applicable, project should identify committed/secured partner funding and/or other partner contributions (describe) and how it is integrated into the project)

This project would be implemented in partnership with Camp Richardson Resort, under the resort’s Granger-Thye fee offset program. Granger-Thye funds would compliment the project and provide funding for facility improvements that are not appropriately funded through SNPLMA, such as rehabilitation of underground utility services within the campground or other improvements that do not protect water quality. In addition, US Forest Service Recreation Site Improvement (RSI) funds have been allocated to replace two of the existing campground restroom/shower buildings.

***Note:** The form requests information about project goals, objectives, accomplishments, and questions the program is designed to answer across several different sections. These issues are closely linked and your individual responses should provide a cohesive description.*

Goal – Purpose and Need (“larger” statement of future expected outcome – usually not measurable)

The goal of this project is to install water quality Best Management Practices at approximately 40% of the Camp Richardson Resort campground area to improve the quality and clarity of Lake Tahoe by reducing sedimentation and other pollution that negatively affect water resources. Another goal of this project is to remove approximately 6,000 square feet of impervious coverage from SEZ at Pope Marsh and to restore this area to healthy meadow conditions.

Objectives (specific measurable statements of action which when completed will move towards achieving the goal)

***Note:** Objectives will form the basis for the milestones/deliverables to be identified in Appendix B-8*

- Describe how fulfilling objectives will contribute to the achievement of one or more environmental thresholds (air quality, water quality, soil conservation, vegetation, fisheries, wildlife, scenic, noise, recreation). Provide measures if applicable. For example: acres treated, miles of stream restored for each objective.

1. Removal of approximately 6,000 square feet of impervious coverage from Pope Marsh SEZ and restoration of those areas with decompaction and site-appropriate native vegetation will reduce soil compaction and erosion within this sensitive soil and habitat area. This environmental improvement will directly contribute to the achievement of water quality, soil conservation, and scenic thresholds. Indirect contributions will benefit fisheries, wildlife, and recreation thresholds.
2. Reduction of over 352,000 square feet of impervious coverage within the project area and restoration of those areas with decompaction and other soil rehabilitation techniques will reduce soil compaction and erosion within these high capability soil areas. This environmental improvement will directly contribute to the achievement of water quality, and soil conservation thresholds. Indirect contributions will also benefit vegetation and recreation thresholds. (This project objective could be reduced in scale by eliminating the BMP improvements from the designated portion of the "Eagle's Nest" campground area. This reduced scale would diminish the project cost by \$500,000 and result in approximately 212,000 square feet of reduction in impervious coverage).
3. Implementation of a paved campground road system and camping spurs will provide controlled storm water run-off and dispersed infiltration, reducing concentrated storm flows and their ability to generate erosion and transport sediment toward Lake Tahoe. This environmental improvement will directly contribute to the achievement of water quality, and soil conservation thresholds. Indirect contributions will also benefit recreation thresholds by improving the quality of the recreation opportunity offered at the public campground.
4. Reconfiguration of two Highway 89 intersections within the resort corridor will incrementally reduce traffic congestion. This reduced traffic congestion, coupled with an approximately 20% reduction in project area campground capacity, will reduce Vehicle Miles Travelled (VMT) and vehicle exhaust emissions, and will directly contribute to the

achievement of air quality thresholds. Indirect contributions will also benefit scenic and recreation thresholds.

- Describe the estimated environmental risks from unintended consequences of the proposed project (if applicable).

Implementation of the BMP retrofit project at Camp Richardson Resort will include the full suite of approved temporary construction BMP measures designed to manage potential erosion generated during construction activities. During project implementation, campground facilities would be temporarily closed to the public, resulting in reduced recreation access to camping opportunities at Lake Tahoe. Construction activities within the Highway 89 Right-Of-Way may require temporary traffic control measures which could cause short-term traffic delays. These delays could result in short-term increases in vehicle emissions and air quality impacts associated with stopped and idling vehicles. The environmental risks of implementing this project are out-weighted by the anticipated environmental benefits that would be realized following project completion.

The design and construction approaches proposed to implement water quality protection Best Management Practices and restore previously compacted areas within the project area are considered to be standard landscape architecture and engineering practices, and have been widely applied to address similar environmental, road, and facility conditions throughout the Lake Tahoe Basin. There are very few, if any, environmental risks from unintended consequences of the proposed project.

Accomplishments

- Describe the anticipated project accomplishments (i.e. products or identifiable environmental benefits being produced or implemented under this project)

Note: Differentiate between direct and/or primary project effects and secondary and/or overall watershed effects.

This project will result in the award, administration, and implementation of a construction contract to reduce erosion and sediment transport within a portion of the Camp Richardson Resort campground.

Environmental benefits will be achieved over a 31 acre project area in close proximity to Lake Tahoe. Removal of approximately 6,000 square feet of impervious coverage from Pope Marsh SEZ and restoration of those areas with decompaction and site-appropriate native vegetation will reduce soil compaction and erosion within this sensitive soil and habitat area. A reduction of over 352,000 square feet of impervious coverage within the project area and restoration of those areas with decompaction and other soil rehabilitation techniques will reduce soil compaction and erosion within these high capability soil areas. Implementation of a paved campground road system and camping spurs will provide controlled storm water run off and dispersed infiltration within the project area, reducing concentrated storm flows and their ability to generate erosion and transport sediment toward Lake Tahoe. These facility BMP improvements will directly benefit the quality and clarity of water entering Lake Tahoe from the project area.

Reconfiguration of two Highway 89 intersections within the resort corridor, coupled with an approximately 20% reduction in project area campground capacity, will incrementally reduce traffic congestion. This reduced traffic congestion will reduce vehicle exhaust emissions and will directly contribute to air quality improvement.

- Describe how the project results/accomplishments will be communicated and made available to the public.

Implementation of this project will be monitored by LTBMU staff to evaluate effectiveness of temporary and permanent water quality protection BMP measures. Results of this effectiveness monitoring will be made available to the public via the LTBMU website, and included in the annual BMP monitoring reports.

This project is located in a highly visible area and implementation would occur during peak use visitation periods. A project sign would be erected during construction to inform the public that water quality protection BMPs were being implemented at a portion of the campground, and provide contact information if a member of the public wanted further information.

- If you checked “yes” for the project being consistent with and contributes to TMDL pollutant reductions please consider and integrate the following in the project description:

- Describe whether, and how, the project demonstrates advanced, alternative, or innovative practices.

The project will be implemented using the approach of Low Impact Development (LID) to achieve storm water management, erosion control, and water quality improvements within the project area. The LID approach of distributing storm water run-off and infiltrating it as close to where it originated, in contrast to concentrating

and conveying it, will reduce long term facility maintenance needs as they relate to sediment and storm water control. This approach will increase the project's long term viability and overall sustainability.

b) If project includes project level monitoring, describe ability of proposed monitoring strategy to contribute to the state of TMDL knowledge. Also describe if purpose of the capital project is to conduct data collection and/or analysis related to Lake Tahoe clarity.

The project will provide qualitative data to inform TMDL knowledge, no quantitative data will be collected.

c) Describe treatment approach for reducing pollutants and/or measures to address connectivity between pollutant sources and Lake Tahoe or its tributaries. Identify target pollutants, and, to the degree feasible, provide quantitative estimates of project effectiveness at reducing pollutant loads (and/or a commitment to provide post-project estimates).

The Low Impact Development approach to control sediment and storm water within the project area will utilize the area's natural soil infiltration capability to reduce erosion and sedimentation within the project area. By distributing storm water rather than concentrating it, the erosive forces of this run-off can be avoided. This treatment approach will target fine sediment particles to keep them within the project area, and out of Lake Tahoe and its tributaries. Through the use of paved vehicle travel surfaces and source control, the generation of sediment will be reduced. Any sediments that are tracked into the campground road system will be shed to the roadside during storm events as a result of the detailed grading of the road surface. Capture of larger sediment particles, achieved through this grade and source control will reduce the amount of fine sediment that is initially generated, and will improve the designed system's effectiveness at capturing fine sediment and holding it in place within the project area.

Treatment is designed to reduce the areas of compacted surfaces where possible, and to hydrologically disconnect remaining compacted surfaces from water bodies. The target pollutant is sediment and associated nutrients. There is currently no quantitative estimate of the project's effectiveness at reducing pollutant loads. Please reference other sections of this proposal for quantitative estimates regarding reductions in high capability and SEZ impervious coverage.

d) If appropriate, describe whether, and how, the project can be combined or coordinated with other TMDL implementation projects.

This project would be implemented in coordination with CalTrans and that agency's 2011 planned erosion control project along Highway 89, which is consistent with the Vision Plan for Camp Richardson Resort. Coordination meetings have already begun between the Forest Service and CalTrans, to ensure that these two environmental improvement projects compliment each other and avoid redundant efforts.

Monitoring

- Describe the project monitoring that will be implemented as part of this project including:

- List the questions the monitoring program is designed to answer.

Were temporary and permanent BMPs implemented as planned/designed and are they effective at protecting soil and water quality?

- Describe any coordination with, or input from, the science community on monitoring and adaptive management that has occurred on the development of this nomination and what changes (if any) to the project were made as a result of this input.

Monitoring protocols are based on the Region 5 USFS Best Management Practices Evaluation Program (BMPEP) handbook. This handbook has gone through extensive peer review within the agency, and continues to be revised as practitioners identify problems with, or improvements to, the protocols.

- Describe the methods and strategies (i.e. monitoring, research, or both) that will be used to verify whether the project goals and objectives have been met? (*Note: A detailed monitoring plan and/or research plan is not required, however, enough detail must be provided to allow someone that is unfamiliar with the project to understand and evaluate the proposed methods and strategies.*)

Monitoring will be conducted using Region 5 USFS BMPEP protocols, and the LTBMU Temporary BMP monitoring protocols (which are patterned after the BMPEP). These protocols walk the reviewer through a set of questions to evaluate whether BMPs were implemented as planned/designed and whether they were successful at protecting soil and water quality based on visual observations of erosion and sediment transport processes. The answers to these questions are then scored using a “rule set” imbedded within the database used to store the data, that rates the BMPs evaluation as either successful or unsuccessful, for both implementation and effectiveness. The BMPEP data is input into a regional database to provide a statistically robust sample for each suite of BMPs across the Region. The data provided is qualitative in nature, relying on visual observations rather than quantitative measurements. BMPEP monitoring is funded through USFS appropriations and will not be funded through this project.

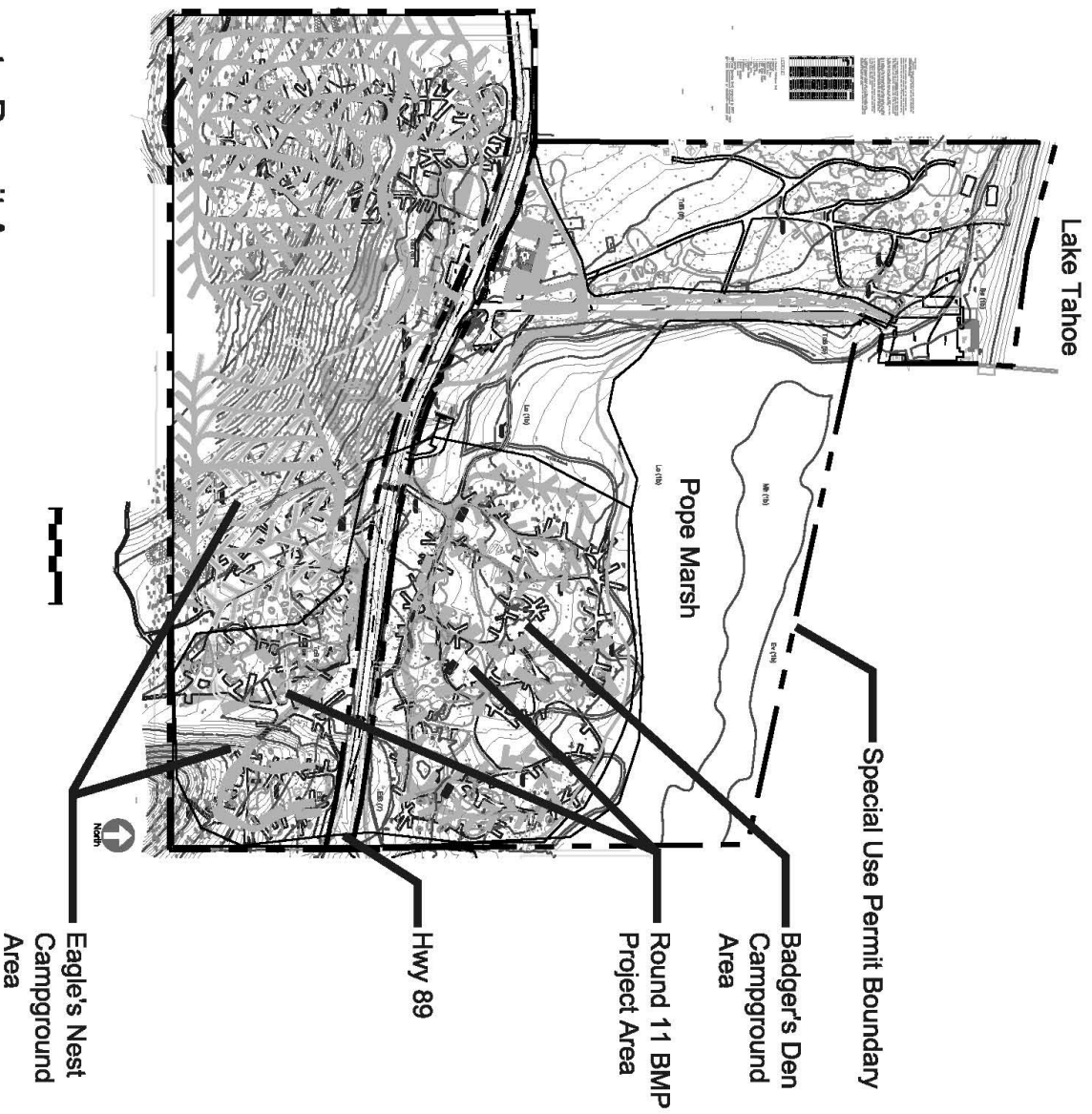
- Describe whether the monitoring or research associated with this project fits into or is part of a larger monitoring or research program.

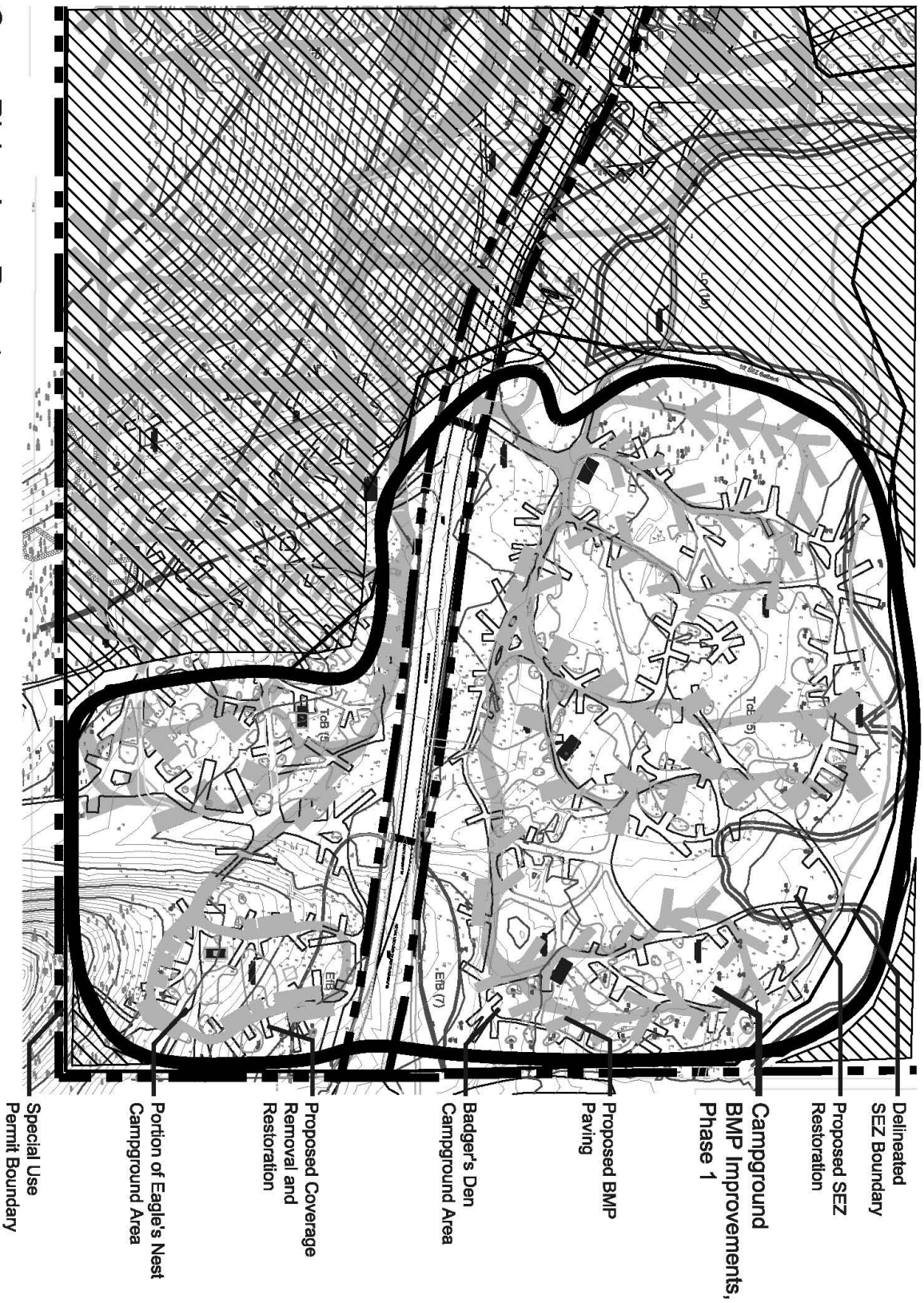
The BMPEP is part of a Regional Monitoring Program within the Forest Service, and may be adopted nationally. Both protocols are part of the large Soil and Water Quality Monitoring Program at the LTBMU.

- Describe how information from the monitoring and/or research will be used to improve the continued performance of the proposed project or future similar projects.

In the short term, information collected is used to fix or redesign individual project BMPs that are rated as unsuccessful. In the long term, information is used at both the local and regional level to develop solutions to chronic problems identified in either implementation or effectiveness of BMPs.

Camp Richardson Resort - Permit Area





Camp Richardson Resort
Round 11 Lake Tahoe SNPLMA Project Area

Appendix B-8

LAKE TAHOE RESTORATION PROJECTS ESTIMATED NECESSARY EXPENSES & KEY MILESTONE DATES

Project Name:	FS Public Resorts BMP Retrofits, Phase 2	Agency:	USFS - LTBMU
Prepared by:	Daniel Cressy	Phone:	(530) 543 - 2857
SNPLMA Project #:		EIP #:	984

Identify estimated costs of eligible reimbursement expenses:

1. Planning, Environmental Assessment and Research Costs (specialist surveys, reports, monitoring, data collection, analysis, NEPA, etc.)	\$ 10,000	0.5	%
2. FWS Consultation – Endangered Species Act	\$		%
3. Direct Labor (Payroll) to Perform the Project	\$		%
4. Project Equipment (tools, software, specialized equipment, etc.)	\$		%
5. Travel (including per diem where official travel status required to carry out project, such as serve as COR, experts to review reports, etc.)	\$		%
6. Official Vehicle Use (pro rata cost for use of Official Vehicles when required to carry out project)	\$		%
7. Cost of Contracts, Grants and/or Agreements to Perform the Project	\$ 1,650,000	82.5	%
8. Other Direct and Contracted Labor: Agency payroll for the Contracting Officer to do project procurement, COR, Project Inspector, Sec. 106 Consultation if required, NEPA Lead, Project Manager, Project Supervisor, and subject experts to review contracted surveys, designs/drawings, plans, reports, etc.; Also covered is the cost to contract for a Project Manager and/or Project Supervisor if contracted separately from other project contracts)	\$ 100,000	5	%
9. Other Necessary Expenses (see Appendix B-9)	\$ 240,000	12	%
TOTAL:	\$ 2,000,000	100	%

Estimated Key Milestone Dates:

Milestones/Deliverables:	Date:
Contract Solicitation	3/1/2011
Contract Award	6/1/2011
Contract Notice To Proceed	7/1/2011
Contract Close Out	8/1/2012
Final Completion Date: 12/30/2012	

COMMENTS: